



ALENAIO STREAM FLOOD CONTROL HILO, ISLAND OF HAWAII

Project Location. The Alenaio watershed is in the South Hilo District on northeast Hawaii. Hilo is the principal urban center in the South Hilo District and is also the Hawaii county seat. Alenaio Stream originates approximately 11 miles southwest of Hilo.

Authorization. The Alenaio Stream Flood Control Project was initially authorized under Section 101 of the Water Resources Development Act (WRDA) of 1986. However, with the completion of the General Design Memorandum (GDM) in March 1990, the scope and cost of the project was substantially modified, requiring Congressional reauthorization. The WRDA of 1990 reauthorized the Secretary of the Army to construct the project as modified by the March 1990 GDM.

Local Sponsor. The local sponsor for this project is the County of Hawaii who acquired the necessary lands, easements and rights-of-way for the project, at an estimated cost of \$1.1 million, in accordance with the requirements of the Local Cooperation Agreement executed in April 1992.

Completed Work. This flood control project consists of an earthen levee; a rectangular concrete-lined channel; a concrete-lined entrance transition; three floodwall structures; four bridge replacements; relocation of utilities; access roads for channel construction and maintenance; removal of several structures and incorporation of floodplain management regulations in undeveloped areas. An earthen channel at the downstream end of Alenaio Stream (Below Kilauea Avenue) connects the concrete channel to the existing Waiolama Canal. The construction contract for this project was awarded to NOVA Group, Inc. on 14 November 1994 for \$10.2 million. The original contract completion date was June 1997; however, due to the incorporation of various contract modifications, the contract completion date was delayed. The entire project was officially turned over to the County of Hawaii in October 1998. The total project cost was \$15,906,000 (federal: \$10,226,000; non-federal: \$5,680,000). Other related work with the County of Hawaii includes the replacement of all channel wall fence posts, preparation of plans and specifications for bank stabilization at the Hilo Chinese Cemetery and follow-up work by the County of Hawaii for the preparation of stream flow and baseline and cross sections along the approximate centerline of the stream. The contractor has completed the replacement of all corroded fence post along the channel alignment. A contract for the bank stabilization work was awarded in January 2000. The stream data for flowage easements were submitted to the County in February 2000.

Present Status. Hilo Town experienced major flooding during the period of 2-3 November 2000 that caused over \$20 million in damages.

Future Efforts. Rehabilitation of the flood control project due to damages incurred by recent flood events is currently underway in the Plans and Specifications phase of the construction effort. The project is scheduled for completion in early 2003.